

Notice of Allowability

Application No.

09/939,983

Examiner

Joseph S. Del Sole

Applicant(s)

YAMAUCHI ET AL.

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the response of 9/3/03.
2. ☒ The allowed claim(s) is/are 1-11.
3. ☒ The drawings filed on 27 August 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input checked="" type="checkbox"/> Interview Summary (PTO-413), Paper No. <u>1063</u> |
| 5 <input type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. _____ | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Kevin Lemack on 10/15/03.

The application has been amended as follows:

in the claims: (see the listing of claims starting on page 4)

2. The following is an examiner's statement of reasons for allowance: the prior art of record fails to teach or suggest a vacuum apparatus having a frame between upper and lower press plates via seals; an interpenetrated portion on a member; a seal apparatus for slidably sealing an interval between the interpenetrated portion and a frame; a suction apparatus for bringing a space surrounded by the interpenetrated and a frame under a negative pressure, wherein the seal apparatus has a main body with a flexible lip projected therefrom.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Del Sole whose telephone number is (703)

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308-6295. The examiner can normally be reached on Monday through Friday from 8:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wanda Walker, can be reached at (703) 308-0457. The official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306 for both non-after finals and for after finals.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Joseph S. Ed. Sole

J.S.D.

October 16, 2003



ROBERT DAVIS
PRIMARY EXAMINER
GROUP 4800 / 700

10/18/03

Claims

1. (Currently amended) A movable vacuum forming apparatus comprising: a pair of frames provided respectively to upper and lower press plates of a press apparatus via seals for surrounding a predetermined space; an interpenetrated portion provided at one of the frames and capable of being interpenetrated into other of the frames movably in an up and down direction; a seal apparatus for slidably sealing an interval between the interpenetrated portion and the other of the frames; and a sucking apparatus for bringing a space surrounded by the interpenetrated portion and the other of the frames under a negative pressure, wherein the seal apparatus has a main body with a flexible lip projected therefrom that seals the interval by compensating for a strain of the interpenetrated portion caused by the negative pressure of the space.
2. (Currently amended) The movable vacuum forming apparatus according to claim 1, wherein; the seal apparatus is a packing mounted to the interpenetrated portion for being brought into sliding contact with an inner periphery of the other of the frames ~~and includes a lip having a size correspondence with the strain the interpenetrated portion.~~
3. (Currently amended) The movable vacuum forming apparatus according to claim 1, wherein; the seal apparatus is a packing mounted to the other of the frames and brought into sliding contact with an outer periphery of the interpenetrated portion ~~and includes a lip having a size in correspondence with the strain of the interpenetrated portion.~~

4. (Original) The movable vacuum forming apparatus according to claim 1, further comprising a connecting piece for connecting the pair of frames movably in the up and down direction by a predetermined length to thereby integrate the pair of frames.

5. (Original) The movable vacuum forming apparatus according to claim 1, wherein; the other of the frames provided with the interpenetrated portion includes an uninterpenetrated portion which is not interpenetrated into the one of the frames and the suction apparatus vacuums the surrounded space via the uninterpenetrated portion.

6. (Original) The movable vacuum forming apparatus according to claim 1, further comprising: a hole provided at the one of the frames and connected to the suction apparatus; a first notched groove formed at an upper face of the one of the frames and communicated with the hole; and a second notched groove formed at an upper face of the interpenetrated portion and communicated with the first notched groove, wherein the suction apparatus vacuums the surrounded space via the first notched groove and the second notched groove.

7. (Currently amended) A movable vacuum forming apparatus comprising: one frame provided between upper and lower press plates of a press apparatus for surrounding a predetermined space provided at the upper press plate via a seal; a base provided at the lower press plate via a seal and having an interpenetrated portion capable of being

interpenetrated to the one frame movably in an up and down direction; a seal apparatus for slidably sealing an interval between the interpenetrated portion of the base and the one frame; and a suction apparatus for bringing a space formed by the interpenetrated portion and the one frame and the upper and the lower press plates under a negative pressure, wherein the seal apparatus has a main body with a flexible lip projected therefrom that seals the interval by compensating for strain of the interpenetrated portion caused by the negative pressure of the space.

8. (Original) The movable vacuum forming apparatus according to claim 7, wherein; the base includes a pressure balance hole for communicating the surrounded space and the space formed between the base and the lower press plate.

9. (Currently amended) A vacuum press apparatus comprising: upper and lower press plates moved in an up and down direction by a predetermined drive apparatus ; one frame attachably and detachably provided between the upper and the lower press plates for surrounding a predetermined space provided at one of the upper and the lower press plates via seal; a member provided between the upper and the lower press plates, provided at the other of the upper and the lower press plates via a seal and having an interpenetrated portion capable of being interpenetrated to the one frame movably in the up and down direction; and a seal apparatus for slidably sealing an interval between the interpenetrated portion of member and the one frame; and a suction apparatus for bringing a space surrounded by the interpenetrated portion and

the one frame under a negative pressure, wherein the seal apparatus has a main body with a flexible lip projected therefrom that seals the interval by compensating for strain of the interpenetrated portion caused by the negative pressure of the space.

10. (Original) The vacuum press apparatus according to claim 9, wherein the member is a frame.

11. (Original) The vacuum press apparatus according to claim 9, wherein the member is a base.